

Remarks/Arguments:

Applicants appreciate the Examiner's thorough and detailed review of this application. In response to the Examiner's comments explaining the reasons for the claim objections and rejection, applicants have amended their claims as hereinabove shown and request reconsideration and allowance of the amended claims for the following reasons.

No new matter has been introduced by the present amendments. The language "adapted to prevent precipitation from accumulating on said duct top wall..." introduced in claims 1 and 11 finds support in the specification overall as well as in page 1 lines 12- 20 where it is explained that the problem solved by this invention is avoidance of snow and water accumulation on the duct top surface.

The claims have also been amended to replace the term "cover panel" by the term "cover section." It is believed that the term "section" better describes the cover structure.

1. Claim rejections under 35 U.S.C. § 112, 2d paragraph.

The Examiner is correct in this rejection. Applicants have amended claim 1 to eliminate the confusion resulting from using the term "top wall" in both original claims 1 and 2.

2. Claim rejections under 35 U.S.C. § 102(b).

Claims 1-3 are rejected as being anticipated by George, U.S. patent # 4,334,577. Applicants respectfully traverse this rejection in view of the amendment to claim 1. George shows an air duct that indeed includes side wall 80, bottom wall 78 and top wall 76 where a pair of angled cover panels 90 are provided over the top wall. However, the angled cover panels in George do not form a peaked roof adapted to prevent precipitation from accumulating on top of said duct (that is a roof that is closed on top), because the George roof panels are not connected on top but provide an opening slot 88 designed to permit outside air to enter into the air duct system. Should the George structure be used out of doors in an otherwise unprotected location the roof would not prevent precipitation from entering through opening 88/93 and accumulating within the air duct top wall 76 as shown in George figure 5. Thus George does not anticipate the amended claims 1-3.

3. Claim rejections under 35 U.S.C. § 103(a).

1. Claims 5-7, 10, 15-17 and 20 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of the teachings of George in combination with the teachings of Lambert, U.S. patent 3,227,063.

Claims 5-7 and 10 are dependent claims depending of claim 1 while claims 15-17 and 20 are dependent claims depending of claim 11. Claim 11 as amended includes the same roof description as claim 1, therefore the same reasoning regarding non obviousness of these claims over George and Lambert applies as for claims 5-7 and 10.

Claims 5-7 and 10 depend from claim 1 therefore as amended include as a claim limitation in the air duct structure a roof adapted to prevent accumulation of precipitation on its upper/outer surface in out of door installations. As stated above George's structure would not provide such function because George includes a top opening in its roof to allow outside air intake into the duct system. Lambert does not correct this deficiency in George.

Lambert teaches a duct air diffusion system for use within a ceiling, that is in a protected environment. The Lambert reference does not teach a structure designed to protect an outside air duct from the elements, the objective of this application. Neither does Lambert add anything to the George structure that would make one either realize the problem solved by this invention or even end up with a structure in the nature of the presently claimed structure. George in combination with Lambert only result in an air circulation duct system that provides air intake from outside the duct and air diffusion for the conditioned air through the ceiling of the rooms being air conditioned.

Therefore claims 1 and 11 are not obvious under 35 U.S.C. § 103(a) because the combined structures would not produce the claimed structure. Nothing in either reference suggests modifying either reference structure to obtain the desired result, to wit the prevention of precipitation accumulation on top of an air duct in an out of doors installation.

Therefore claims 5-7, 10, 15-17 and 20 that depend of claims 1 and 11 should also be allowed as they include all the limitation and distinguishing elements of independent claims 1 and 11.

2. Claims 1-6, 8-16 and 18-20 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of Haack, U.S. patent # 5,918,644, in view of George. Again applicants respectfully traverse this rejection.

In one sense, substantially the same arguments presented above regarding the combination of George with Lambert are applicable to the combination of George with Haack. Haack does indeed teach the use of duct wall with insulating materials and ducts of various cross sections. However the problems addressed by Haack are not precipitation accumulation on the upper surface of air ducts used in out of doors applications but materials used for duct construction. While figure 2 shows an air duct having a triangular cross section, all this figure and associated description in the specification disclose and teach is a method and materials for making a triangular cross section air duct.

The present invention is directed to an air duct with a top cover roof designed to protect the top of the air plenum from accumulating precipitation. Figure 2 of Haack does not disclose or teach a duct with side walls and a roof designed to prevent precipitation from accumulating on the top wall of the duct. The question really is whether the person skilled in the art searching for a solution to providing element protection for out of doors air conditioning ducts would combine figure 2 of Haack with the structure of George to obtain the presently claimed structure.

There is no suggestion in either reference that the problem solved by the present invention was contemplated, and one may not use the present invention to provide such suggestion. Combining prior art references without inherent evidence of such motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight. See Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 U.S.P.Q. 543, 547 (Fed. Cir. 1985). "The invention must be viewed not with the blueprint drawn by the inventor, but in the state of the art that existed at the time." In re Dembczak, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

The best that can be said in this instance is that a person skilled in the art, having knowledge of both references, may be induced to try the combination suggested by the Examiner to solve a problem none of the references recognized. However, "When the most one may say about combining the two references is that one skilled in the art might find it obvious

to try various combinations this is not the standard of 35 U.S.C. §103." (In re Fine 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988); In re Geiger 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987).

4. Conclusion

Claims 1 and 11 the only two independent claims in this application have been amended to clearly state that the claimed structure includes a roof for an duct designed to provide protection from an accumulation of snow or water for ducts installed out of doors and exposed to the elements. The prior art cited does not show any art that either alone or in combination recognizes and/or addresses such problem to provide a solution as claimed. For the above reasons applicants respectfully request reconsideration and early allowance of the claims as amended.

Respectfully submitted,



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